

When I die, I will go to the university

A study of body donation in the Netherlands

Proefschrift

ter verkrijging van de graad van doctor

aan de Radboud Universiteit Nijmegen

op gezag van de rector magnificus prof. mr. S.C.J.J. Kortmann,

volgens besluit van het college van decanen

in het openbaar te verdedigen op woensdag 3 oktober 2012

om 13.00 uur precies

door

Sophie Henriëtte Bolt

geboren op 26 januari 1982

te Leidschendam

Promotoren

Prof. dr. H.J.M. Venbrux

Prof. dr. R.N. Eisinga

Copromotoren

Dr. P.O. Gerrits

Dr. M. Altena

Manuscriptcommissie

Prof. dr. C. van Nieuwkerk

Prof. dr. P.L.H. Scheepers

Prof. dr. P.J.C.L. van der Velde

Table of Contents

1	Introduction: Death, donation and dissection	1
2	Motivation for Body Donation to Science: More than an altruistic act	37
3	Personality and Motivation for Body Donation	51
4	Over My Dead Body: Body donation and the rise in donor registrations in the Netherlands	69
5	Anatomist on the Dissecting Table? Dutch anatomical professionals' views on body donation	95
6	Dead Bodies Matter: Gift-giving and the unveiling of body donor monuments in the Netherlands	113
7	Conclusion: A meaningful death	145
I	'Last-minute' Donations Influence Actuarial Prediction in an Anatomical Body Donation Program	161
II	An Altar in Honor of the Anatomical Gift	179
III	Nederlandse Samenvatting / Dutch Summary	189
IV	About the author	197

The research chapters of this dissertation have been published previously and are reprinted from:

Chapter 2

Bolt, Sophie, Venbrux, Eric, Eisinga, Rob, Kuks, Jan B.M., Veening, Jan G., and Gerrits, Peter O. (2010). Motivation for body donation to science: more than an altruistic act. *Annals of Anatomy*, 192 (2), 70-74.

Chapter 3

Bolt, Sophie, Eisinga, Rob, Venbrux, Eric, Kuks, Jan B.M., and Gerrits, Peter O. (2011). Personality and motivation for body donation. *Annals of Anatomy*, 193 (2), 112-117.

Chapter 4

Bolt, Sophie, Eisinga, Rob, Altena, Marga, Venbrux, Eric, and Gerrits, Peter O. (2012-2013). Over my dead body: body donation and the rise in donor registrations in the Netherlands. *Omega, Journal of Death and Dying*, 66 (1), 57-77.

Chapter 5

Bolt, Sophie, Venbrux, Eric, Eisinga, Rob, and Gerrits, Peter O. (2011). Anatomist on the dissecting table? Dutch anatomical professionals' views on body donation. *Clinical Anatomy*, 25 (2), 168-175.

Chapter 6

Bolt, Sophie (f.c.). Dead bodies matter. Gift-giving and the unveiling of body donor monuments in the Netherlands. *Medical Anthropology Quarterly*, in press.

Appendix I

Wijbenga, Björn S., Koning, Ruud H., Kooistra-Akse, Berdien J., Bolt, Sophie, Kuks, Jan B.M., Van Zanten-Timmer, G., Veening, Jan G., and Gerrits, Peter O. (2010). 'Last-minute' donations influence actuarial prediction in an anatomical body donation program. *Annals of Anatomy*, 192 (1), 2-6.

Appendix II

Kooloos, Jan G.M., Bolt, Sophie, Van der Straaten, Joop, and Ruiter, Dirk J. (2010). An altar in honor of the anatomical gift. *Anatomical Science Education*, 3 (6), 323-325.

Introduction: Death, donation and dissection

'When I die, I will go to the university'

'When I die, I will go to the university' was a proud statement by Paul at birthday parties and other social occasions. In between coffee and pie, Paul had always expressed himself clearly about his wish to donate his body to medical science after death. Born in 1913 in the Catholic southern part of the Netherlands, Paul was raised Catholic. Later in life, he withdrew himself from the religious institute and gradually, his claim 'I will go to heaven' changed in 'I will go to the university'.

The immediate cause for bequeathing his body to science was the serious illness of his wife and her life-saving blood transfusion. Following this event, Paul felt that he wanted to do something in return to express his gratitude for the medical help he and his wife had received. He started by donating his blood and when he discovered the possibility of whole body donation he immediately registered as donor at an anatomical institute. Body donation was one of the things in life in which Paul had shown a strong perseverance. Following his firm principles and goals, he said: 'do not waste my body, but let others learn from it.' So it happened that not long after Paul died, at the age of eighty-nine, his last wish was fulfilled.

Like Paul, each year there are about 650 people who voluntarily donate their entire body, after death, to one of the eight anatomical institutes in the Netherlands. Currently about 16,000 people, 0.1% of the total population, are registered as body donor at one of these institutes (Bolt et al., 2011b). Body donation is mentioned in Dutch legislation as the third method for body disposition next to burial and cremation. Thanks to body donation, students are given the

opportunity to learn practical human anatomy and medical professionals can refine their surgical techniques.

This research project¹ about body donation in the Netherlands is inspired by the contribution of the French anthropologist Robert Hertz (1960 [1907]) to the sociology of death. Hertz (1960 [1907]) argues that, after someone dies, the society is affected and the mourners' ideas about the dead are subject to an extended process of transformation and transition. In addition, he reasons that the ways in which bereaved relatives deal with corpses depend on social values and beliefs in society. In Hertz' line of thought these notions are attached to the physical corpse and people express them through their choice for body disposition and the accompanying funeral rituals (Davies, 2000). In most cases of death, the next of kin choose the way of body disposition for the deceased. Interestingly, in the case of body donation, it is the individual person rather than the next of kin who opt for this alternative disposition method.

Paul's statement 'When I die, I will go to the university' is a reflection of his changing Christian view of heaven towards a more personal view of an afterlife in service of science. In the past, at least until the end of the 1960s, religious institutions had strong authority in matters of death and dying in the Netherlands. Today, these perceptions ensue from a more individualized religiosity (Wouters, 2002). The Dutch use a variety of personal and informal sources in spite of the rules and expectations formulated by the traditional religious institutions to inform their perspective on and dealings with death and dying (Becker, 2006; Wouters, 2002). Consequently, people draw their inspiration to give meaning to their existence from various formal and informal sources.

I argue that this research about body donation provides an excellent opportunity to study notions of death in secularized Dutch society. To better understand the meaning-making around death and dying within body donation, I analyse it as human gift-giving behaviour. I realize that body donation is a gift-giving process in which different parties get related by the extraordinary gift of a whole body donated to an anatomical institute. I use Marcel Mauss' (1990 [1925]) classical anthropological analysis of gift-giving, which provides a basis for comprehending the

¹ This study is part of the multidisciplinary research group Refiguring Death Rites (RDR) at the Radboud University Nijmegen. The researchers of RDR study the new rituals and notions of religiosity surrounding death and dying in the Netherlands (Venbrux, 2007). The RDR project is funded by the Netherlands Organization for Scientific Research (NWO).

complexity of gift-giving. The term donation originates from the Latin *donare*, which means 'give as a gift'. Mauss (1990 [1925]) pays special attention to the derivative *do ut des*, 'I give so that you may give,' and in this way emphasizes that gift-giving entails the obligation to reciprocate. His insights are useful to study the interaction of giving and receiving and to get a complete picture of the meaning-making within body donation.

Whereas body donors, as follows from Paul's story, have very strong and personal motivations to opt for this form of body disposition, through their donated bodies they also involve and create connections between groups of peoples: themselves, anatomical professionals and their bereaved. Therefore, throughout this research I pose the following main research question:

What meanings do body donors, anatomical professionals and bereaved attribute to the gift of bodies to anatomical science?

Thus, the first party, the body donors start the gift-giving process by donating their entire body after death. I study their gift motives and examine if they get something in return for their gift. To better understand self-concerned motives I study who body donors are and if they have certain specific personality traits. Remarkably, during the past several years the registrations numbers of Dutch body donors have increased (Wijbenga et al., 2010). With the significant increase of registration numbers the anatomical demand of about 650 bodies per year is even exceeded (Bolt et al., 2011b). These developments induce me to analyse motivation for body donation within the specific Dutch context. I examine if broader societal changes in the Netherlands have created circumstances in which people have become more likely to register as a body donor.

The second party, the anatomical professionals, such as prosectors and anatomists, use the corpses of body donors in the dissecting room for education and scientific research. Prosectors dissect the bodies and prepare them for demonstration. Anatomists study the structures and functions of the human body. Most of them have a background in biological or medical science, and work as researchers and educators. I study anatomical professional's views on body donation and what meanings they assign to the donated bodies. I wonder if they are willing to equally reciprocate body donation by donating their own body in return. Furthermore, I study the second remarkable development within Dutch body donation, which is the construction of body donor monuments since 2007. I

investigate why, for the very first time, anatomical professionals give commemorative public attention to the gift of body donors.

Finally, the third party, the bereaved are close relatives, family and friends, of the deceased donor. To better comprehend the bereaved relatives one must realize that donors make an independent choice to bequeath their body. As a result, the bereaved are the ones who have to deal with the consequences of this decision after the donor's death. Body donation brings about the exceptional situation in which the dead body will be absent at the funeral as the body has to be brought to an anatomical institute within 24 hours and remain there. Because the corpses of body donors are not given back to their family and friends, their rituals around death, loss, and mourning are complicated. I study how bereaved experience body donation and how they take leave of the donors. As the bereaved have recently been provided with body donor monuments, I also examine what meanings they attribute to this new commemoration place.

Theoretical dissection

This is a study about body donation. Until now there has been no thorough research about this specific topic in the Netherlands. The research field is relatively unexplored and information about Dutch body donation is fragmented and not easily accessible. Internationally, studies have been conducted on the ethics, procedures, characteristics, nature, obstacles and strategies of body donation bequest programs in several countries, such as in China (Zhang et al., 2008), New Zealand (Fennell and Jones, 1992; McClea, 2008; McClea and Stringer, 2010), Nigeria (Akinola, 2011), the United Kingdom (Greene, 2003; Richardson and Hurwitz, 1995), the United States (Anteby and Hyman, 2008; Boulware et al., 2004; Bullen and Crase, 1998; Christensen, 2006; Dluzen et al., 1996; Lagwinski et al., 1998), South-Africa (Labuschagne and Mathey, 2000), and Taiwan (Chang and Leung, 2005). These studies have been useful to develop my own research questions and arguments with regard to body donation in the Netherlands. The next section presents the underlying theoretical framework of my study.

In death announcements of body donors it is often stated that donors have an explicit and conscious wish to donate their body. To understand this explicit wish I analyse the motives for body donation by means of gift-giving theories. Previous studies of potential body donors, in New Zealand and the United Kingdom (Fennell and Jones, 1992; Richardson and Hurwitz, 1995), primarily focus on the giving aspect in body donation. They identify the wish to be useful as the main motivation for

body donation and present it as a positive expression of altruism. Many other donor studies also report altruism as the primary reason for blood, brain and organ donation (Arnold et al., 2002; Glaw et al., 2009; Gonzalez et al., 2008; McClea, 2008; Mocan and Tekin, 2007; Sojka and Sojka, 2008). In general, these studies are highly influenced by Titmuss' (1970) thoughts on the dominance of altruism in blood donation (Joralemon, 1995; Rapport and Maggs, 2002). The gift of life metaphor in these studies expresses selfless, altruistic, voluntary, and generous aspects of the donation in benefiting someone else's life (Joralemon, 1995).

I want to look beyond altruism and contribute to the studies that advocate broadening the donation discourse (Ferguson et al., 2008; Steele et al., 2008). I argue that donation studies can benefit from anthropological insights which highlight that gifts are both altruistic and indebted, spontaneous and calculated (Scheper-Hughes, 2007). This means that I believe that donor studies should also examine what people receive by donating.

To better understand self-concerned motives this study examines who body donors are and what they can receive by donating their body. To improve the understanding of donor behaviour and to look beyond altruism, the study of donors' personality traits can be a way to broaden the view. It raises questions about how donors' behaviour is influenced by their personality characteristics and to what extent their alternative choice for body donation is consonant with their personality. For instance, in the death announcement of Paul, it was stated that body donation was in line with his way of life: 'He lived on his own characteristic way and he has taken leave of us like that.'

There are few studies that look into the role of donors' personality and motivation for donation. They find positive relationships between personality traits and living organ donation (Bekkers, 2006), blood donation (Ferguson, 2004; Landolt et al., 2003), and organ donation (Landolt et al., 2003). I believe that understanding the relationship between personality traits and donor motivation may improve insights about donor behaviour, because it can show how people can receive a personal reward from body donation. With these insights one can easier approach potential donors and anticipate on their needs. The insights are relevant for body donor programmes elsewhere struggling with a scarcity of body donors.

Generally, personality psychologists agree that there are five broad dimensions of personality: extraversion, neuroticism, openness to experience, conscientiousness, and agreeableness (Costa and McCrae, 1995; Digman, 1990; Goldberg, 1990). This descriptive model of personality derives from analysis of terms which people use to describe personality traits of themselves and others (Pervin and